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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/676,587	10/01/2003	Uwe-Jens Krabbenhoft	HK-771	7984
24131 7590 07/26/2007 LERNER GREENBERG STEMER LLP P O BOX 2480 HOLLYWOOD, FL 33022-2480			EXAMINER CHENG, PETER L	
			ART UNIT 2625	PAPER NUMBER
			MAIL DATE 07/26/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/676,587	KRABBENHOFT, UWE-JENS	
	<b>Examiner</b>	<b>Art Unit</b>	
	Peter L. Cheng	2625	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1) ☒ Responsive to communication(s) filed on 01 October 2003.

2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4) ☒ Claim(s) 1-3 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.

6) ☒ Claim(s) 1-3 is/are rejected.

7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.

8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

9) ☐ The specification is objected to by the Examiner.

10) ☒ The drawing(s) filed on 01 October 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☒ All    b) ☐ Some \*    c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.

2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.

3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 10/1/2003 and 8/30/2004.

4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Drawings*

1. The drawings are objected to because:
  - **Fig. 2A step S2:** from the specification, "the lightness curve L(K2) is determined from the color profile of the second printing process" [page 13, lines 19 – 21], it is assumed that applicant intended to cite **Determine Lightness Curve L(K2) From the Color Profile of the Second Printing Process** instead of **Determine Lightness Curve L(K2) From the Color Profile of the First Printing Process**;

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application

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must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by **KONDO [US Patent 6,891,649 B1]**.

As for claim 1, KONDO teaches a method for producing a printing process adaptation with which color values of a first printing process **[Fig. 1 color values CMYK for "printing machine" 12]**

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are converted into color values of a second printing process [Fig. 1 color values C'M'Y'K' for "printer" 16]

so that black build-up of the first printing process being substantially transferred into the second printing process and *visual impressions* of printed colors in the first and second printing processes being substantially identical [Fig 2. illustrates the "first printing process" colors **C** (cyan), **M** (magenta), **Y** (yellow) and **K** (black) which are converted to the "second printing process colors **C'** (cyan), **M'** (magenta), **Y'** (yellow) and **K'** (black). KONDO cites, "A major object of the present invention is to provide an apparatus for generating a proof which agrees with evaluations and does not make the observer feel discrepancies when a proof of an image to be generated by a first device is produced by a second device and evaluated"; col. 2, lines 22 - 26],

which comprises the steps of:

**performing a first printing process adaptation *without maintaining the black build-up* for transforming the color values of the first printing process into *transformed color values* of the second printing process [Fig. 2, conversion of input CMYK data to output C'M'Y' data by means of the "printing profile" 22, "printer profile" 24, and "K gradation conversion table" 26. The conversion of input CMYK data to output C'M'Y' data through "printer profile" 24 does not maintain the black build-up as it only produces chromatic colors, C'M'Y'.**

"The printing profile 22 is a conversion table for converting color data D composed of printing image data C, M, Y, K into colorimetric data  $L^*$ ,  $a^*$ ,  $b^*$  in the CIE colorimetric system which are device-independent data"; **col. 4, lines 63 – 66**. "A plurality of reverse conversion tables  $LUT(LabK') \rightarrow C'M'Y'$  ... are stored as the printer profile 24"; **col. 5, lines 44 – 46**];

**performing a second printing process adaptation *while maintaining the black build-up* for transforming the color values of the first printing process into *further transformed color values* of the second printing process [Fig. 2, "K gradation conversion table" 26 contains further transformed color values of the first printing process to the second printing process. "The K gradation conversion table 26 is established such that the colorimetric value of a printed material composed of only the printing image data K is equalized to the colorimetric value of a proof composed of only the proof image data K"; **col. 5, lines 50 - 54**];**

**and performing a third printing process adaptation for transforming the color values of the first printing process into *additional transformed color values* of the second printing process by performing a weighted averaging of the transformed color values of the first printing process adaptation and of the further transformed color values of the second printing process adaptation [The third printing process adaptation combines the first and second**

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printing adaptations. "The color conversion table generator 18 combines the printing profile 22, the printer profile 24, and the K gradation conversion table 26 ..., thereby generating a color conversion table with K saved for converting the color data D comprising the printing image data C, M, Y, K into the color data D' comprising the proof image data C', M', Y', K"; **col. 5, lines 56 – 62**. The "additional transformed color values" from the "printer profile" **24** and "K gradation conversion table" **26** are weighted according to the input colors CMYK.

Achromatic colors, that is, those appearing white, gray or black, and those which are close to being achromatic, will be transformed with a higher weighting of the second printing adaptation. Conversely, chromatic colors will have be transformed with a higher weighting of the first printing adaptation.]

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. Claims 2, 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over **KONDO [US Patent 6,891,649 B1]** in view of **SCHWEID [US Patent 6,529,291 B1]**.

Regarding claim 2, KONDO does not specifically teach the method according to claim 1, which further comprises

**carrying out the weighted averaging with a weighting function  $f(C1, M1, Y1)$  derived from a proportion of chromatic printing inks in colors of the first printing process.**

SCHWEID teaches a method of converting colors which "provides a smooth transition from a full color to full neutral, and generates an image where a single switch point does not exist **[col. 7, lines 61 - 64]**. Instead, "depending on the value of an incoming neutral tag for a pixel, varying weighted output averages of the color conversion table 32 and TRC 38 are generated **[col. 6, lines 28 - 30]**. Tone reproduction curve (TRC 38), as disclosed by SCHWEID, corresponds to KONDO's "K gradation conversion table 26".



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Color conversion table 32, as disclosed by SCHWEID, corresponds to KONDO's "printer profile 24".

Furthermore, SCHWEID discloses that the "weighting function" depends on the composition of the input colors. SCHWEID cites, "If a full color page is to be rendered, then the color conversion table 32 would be fully used" [col. 6, lines 63 - 65].

It would have been obvious to one skilled in the art at the time the invention was made to combine the teachings of SCHWEID with those of KONDO to provide a smooth transition from a full color to full neutral color by use of a weighting function

Regarding claim 3, KONDO does not specifically teach the method according to claim 2, which further comprises:

**allocating a higher weighting factor to the colors of the first printing process with a high proportion of the chromatic printing inks;**

**and allocating a lower weighting factor to the colors with a low proportion of the chromatic printing inks.**

However, as noted for claim 2, SCHWEID teaches a method whereby colors that contain a higher content of chromatic colors are transformed mainly from a conversion table that does not maintain the "black build-up", and those colors that contain a lower

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content of chromatic colors are transformed mainly from a conversion table that does maintain the "black build-up".

It would have been obvious to one skilled in the art at the time the invention was made to combine the teachings of SCHWEID with those of KONDO to provide a smooth transition from a full color to full neutral color by use of a weighting function

### ***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- U.S. Patent 5,719,956
- U.S. Patent 6,362,808 B1

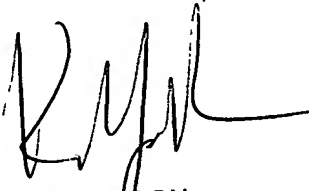
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter L. Cheng whose telephone number is 571-270-3007. The examiner can normally be reached on MONDAY - FRIDAY, 8:30 AM - 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, King Y. Poon can be reached on 571-272-7440. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

plc



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